CHAPTER 20.10

LINCOLN RESIDENTIAL BUILDING CODE

20.10.010 Adoption of 2000 International Residential Code.

Except as hereinafter provided by specific amendment, the International Residential Code for One-and Two-Family Dwellings, 2000 Edition (Second Printing), hereinafter referred to as the International Residential Code is hereby adopted and incorporated into Title 20 of the Lincoln Municipal Code.

One printed copy of the above publication has been filed in the office of the City Clerk for use of and examination by the public. (Ord. 17996 §1; May 13, 2002).

20.10.020 Section R101 Amended; Title, Scope and Purpose.

Section R101 of the International Residential Code is amended to read as follows:

R101.1 Title. These provisions shall be known as the Residential Code for One- and Two-Family Dwellings of the City of Lincoln, Lancaster County, Nebraska, and shall be cited as such and will be referred to herein as "this code."

R101.2 Scope. The provisions of the *International Residential Code for One- and Two-Family Dwellings* shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) with the city or within three miles of the corporate limits of the city and outside of any other organized city or village not more than three stores in height with a separate means of egress and their accessory structures.

R101.3 Purpose. The purpose of this code is to provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within the city and within three miles of the corporate limits of the city and outside of any other organized city or village, and regulating ceratin equipment specified herein.

The purpose of this code is not to create or otherwise establish or designate any particular case or group of persons who will or should be especially protected or benefitted by the terms of this code. (Ord. 17996 §2:May 13, 2002).

20.10.030 Section R103 Amended; Department of Building and Safety.

Section R103 of the International Residential Code is amended to read as follows:

SECTION R103 – DEPARTMENT OF BUILDING AND SAFETY

R103.1 Building official designated. The Department of Building and Safety is hereinafter designated as the building department under the jurisdiction of the Director of Building and Safety, who is hereinafter designated as the Building Official.

R103.2 Appointment; Deleted.

R103.3 Deputies; Deleted.

(Ord. 17996 §3; May 13, 2002).

20.10.040 Section R105.2 Amended; Work Exempt From Permit.

Section R105.2 of the International Residential Code is amended to read as follows:

R105.2 Work exempt from permit. Permits shall not be required for the following. Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

Building:

1. Fences not over 6 feet 4 inches high.
2. Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
3. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2 to 1.
4. Shingling and residing.
5. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
6. Prefabricated swimming pools that are less than 24 inches deep.
7. Swings and other playground equipment accessory to a one- or two-family dwelling.
8. Window awnings supported by an exterior wall.

R105.2.1 Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

R105.2.2 Repairs; Deleted.

R105.2.3 Public service agencies; Deleted.

(Ord. 17996 §4; May 13, 2002).

20.10.050 Section R105.5 Amended; Expiration.

Section R105.5 of the International Residential Code is amended to read as follows:

R105.5 Expiration. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 120 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced.

All permits shall expire after two years. New plans and permit will be required to extend the project. The building official is authorized to grant by written request, one extension of time due to size and scope of project for a period of not more than one year with the payment of two-thirds of the original building permit fee. (Ord. 17996 §5; May 13, 2002).

20.10.060 Section R107, Temporary Structures and Uses; Deleted.

Section R107 of the International Residential Code and all subsections thereof are hereby deleted. (Ord. 17996 §6; May 13, 2002).

20.10.070 Section R108 Amended; Fees.

Section R108 of the International Residential Code is amended to read as follows:

SECTION R108 - FEES

R108.1 General. Fees shall be assessed in accordance with the provisions of this section or shall be as set forth in the fee schedule adopted in the following sections.

R108.2 Permit fees. The fee for each permit shall be as set forth in Table No. 1A.

The determination of value or valuation to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment. The building official may determine valuation by applying the I.C.B.O. valuation or other recognized method of estimating building construction project cost.

The value or valuation used by the building official in computing the building permit and plan review fees is only an estimate and is not intended to be used as conclusive evidence of the actual value of all construction work for which the permit is issued as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment for purposes of determining whether said value exceeds a certain percentage of the fair market value of the building in question.

R108.3 Plan review fees. When a plan or other data are required to be submitted by Section R105.3, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be an amount equal to 20% of the building permit fee shown in Table 1A, for residential buildings of one and two dwelling units. At time of submittal for an application for a building permit for residential buildings of one- and two-family dwelling units, a permit deposit of $100.00 shall be made by the applicant.

The plan review fees in this subsection are separate from and in addition to the permit fees specified in Section R108.2 and shall not be credited to the total building permit fee if such permit is issued. There shall be no refund for plan review after any plan review has been completed by the Department of Building and Safety, even if the application is withdrawn.

One additional plan review of corrections made on the original plans after the initial plan review shall be performed at no cost to the applicant; however, where plans require further corrections, are incomplete, or are changed necessitating additional plan review, an additional plan review fee shall be charged at the rate of ten percent of the total permit fee or $50.00, whichever is greater, for each additional review. Limited permit applications will be subject to additional plan review fees as specified in this section.

Single-family and duplex limited permit reviews will be subject to an additional plan review fee at the rate of ten percent of the total building permit fee or $100.00, whichever is greater.

R108.4 Thermal insulation fees. A fee for each building or structure which is required to provide thermal design and insulation in accordance with the provisions of Chapter 13 of this code shall be paid to the building official. The permit fee shall be equal to ten percent of the building permit fee set forth elsewhere herein for accessory buildings, apartments, and residential buildings of one- and two-dwelling units.

R108.5 Development permit fees.

R108.5.1 A fee shall be assessed for any development permit applied for under Lincoln Municipal Code Chapter 27.55 and shall be paid at the time of application therefor. The fee for each permit shall be as follows:

(1) For all development involving the new construction of buildings or other structures and substantial improvements thereto, except accessory buildings associated with single- and two-family dwellings, an amount equal to ten percent percent of the building permit fee as established under this code or as the same may be amended, with a minimum fee of $150.00.

(2) Mobile home placement and construction of accessory buildings associated with single- and two-family dwellings - $50.00.

(3) All other development permits - $100.00.

R108.5.2 In those cases where a development permit is required for a structure, but a building permit is not required, the value of construction as determined by Section R108.2 of this code shall be used to calculate the development permit fee.

R108.5.3 Any work requiring a development permit commenced prior to the issuance of the permit shall result in the assessment of an investigation fee in accordance with Section R108.7 of this code, which investigation fee shall be in addition to the development permit fee.

R108.5.4 The building official may refund not more than two-thirds of the development permit fee when an application for which such fee has been paid is withdrawn or canceled prior to commencement of plan review.

R108.6 Expiration of plan review. Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the building official. The building official may extend the time for action by the applicant for a period not exceeding 180 days on request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

R108.7 Investigation fees. Work without a permit.

R108.7.1 Investigation. Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

R108.7.2 Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount

of the permit fee required by this code. The minimum investigation fee shall be the same as the minimum fee set forth in Table 1-A. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law.

R108.8 Fee refunds. There shall be no refunds or credits given on permits which have expired. Permit holders returning an unused permit prior to the expiration date of the permit shall be limited to a maximum refund amounting to two-thirds of the total building permit and insulation fee, with the remaining one-third to be used to pay in part the cost of processing the permit. The building official may authorize refunding of not more than two-thirds of the plan review fee or permit deposit paid when an application for a permit for which such fee has been paid is withdrawn or canceled before any plan reviewing is done.

No refund shall be issued on a permit deposit or plan review fee where the refund amount is less than $30.00. (Ord. 17996 §7; May 13, 2002).

20.10.080 Table No. 1-A Added; Building Permit Fees.

Table No. 1-A is added to the International Residential Code to read as follows:

TABLE 1-A – BUILDING PERMIT FEES

Total Valuation	Fee
$0 to and including $1,000	$30.00
Each additional $1,000 or fraction thereof in excess of $1,000	$ 2.00
Reinspection fee (wrong address, work does not pass inspection, work not complete, etc.)	$35.00

(Ord. 17996 §8; May 13, 2002).

20.10.090 Section R109 Section Heading Amended; Inspections and Surveys.

The section heading of Section R109 of the International Residential Code is amended to read as follows:

SECTION R109
INSPECTIONS AND SURVEYS

(Ord. 17996 §9; May 13, 2002).

20.10.100 Section R109.1 Amended; Types of Inspections.

Section R109.1 of the International Residential Code is amended to read as follows:

R109.1 Types of inspections. All construction or work for which a permit is required shall be subject to inspection by the building official and all such construction work shall remain accessible and exposed for inspection purposes until approved by the building official.

Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the city. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the city shall not be valid.

A survey of the lot or lots upon which additions, alterations, or repairs are being accomplished shall be provided by a duly licensed surveyor of the State of Nebraska before plans and specifications shall be accepted by the building official to verify compliance of the construction or work with building line setback requirements of the Lincoln Municipal Code. All boundary corners of a lot or lots with permanent survey monuments shall be marked in the field by a duly licensed surveyor of the State of Nebraska.

It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the city shall be liable for expense entailed in the removal or replacement of any material required to allow inspection. (Ord. 17996 §10; May 13, 2002).

20.10.110 Section R109.1.2 Deleted; Plumbing, Mechanical, Gas and Electrical Systems Inspection.

Section R109.1.2 of the International Residential Code is hereby deleted. (Ord. 17996 §11; May 13, 2002).

20.10.120 Section R109.1.7 Added; Reinspections.

Section R109.1.7 is added to the International Residential Code to read as follows:

R109.1.7 Reinspections. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This subsection is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the inspection record card is not posted or otherwise available on the work site, the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the building official.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid. (Ord. 17996 §12; May 13, 2002).

20.10.130 Section R109.5 Added; Address Identification.

Section R109.5 is added to the International Residential Code to read as follows:

R109.5 Address identification. All additions, alterations, or repairs for which a permit is required by this code shall be provided with a construction address identification sign. Said identification sign shall be a sign of metal, wood, plastic, or other approved rigid material with permanent identification numbers and letters thereon indicating the legally assigned street or other type address assigned by the building official. Said identification sign shall have numbers and letters of such size and shall be so placed upon the construction site that said sign is readily visible and identifiable from the public street. Said identification sign shall be properly maintained during the entire period of time that the construction or work is being accomplished or maintained. (Ord. 17996 §13; May 13, 2002).

20.10.140 Section R110 Amended; Certificate of Occupancy.

Section R110 of the International Residential Code is amended to read as follows:

SECTION R110 – CERTIFICATE OF OCCUPANCY

R110.1 Use or occupancy. No building or structure other than Group U occupancies, shall be used or occupied, and no change in the existing use or occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefor, as provided in Chapter 27.77 of the Lincoln Municipal Code.

It shall be the responsibility of a permit holder or the permit holder's agent to call for all required inspections, including the final inspection, of all additions, alterations, or repairs performed under a plumbing, mechanical, electrical or building permit. Final inspection shall be called for by the permit holder or the permit holder's agent prior to occupancy of the building or structure or portion thereof. In the event any permit holder or permit holder's agent shall fail to call for final inspections as herein provided or in the event any permit holder or permit holder's agent shall permits with no final inspections completed, the building official is authorized to withhold further issuance of any permit under this code to said permit holder or the permit holder's agent until final inspections have been completed as provided by this code.

R110.2 Change in use. Changes in the character or use of a building shall not be made except as specified in Section 3405 of the International Building Code.

R110.3 Certificate issued. After the Building Official performs a final inspection and observes that the required sidewalks along the frontage of any residential zoned single-family or two-family lot abutting upon a local or collector street have been installed, a certificate of occupancy shall be issued when it is found that the building or structure complies with requirements of issuance set forth in Chapter 27.77 of the Lincoln Municipal Code.

R110.4 Temporary certificate. If the Building Official finds that no substantial hazard will result from occupancy of any building or portion thereof before the same is completed, a temporary certificate of occupancy may be issued for the use of a portion or portions of a building or structure prior to the completion of the entire building or structure and issuance of the certificate of occupancy. If the temporary certificate of occupancy is issued for a single- or two-family dwelling located upon a single- or two-family lot abutting upon a local or collector street, the temporary certificate of occupancy shall be conditioned upon the sidewalks along the frontage of said lot being constructed during the same or next construction season.

R110.4.1 Temporary certificate limitations. Each temporary certificate of occupancy shall be limited to a term to be determined by the building official.

R110.5 Revocation. The building official may, in writing, suspend or revoke a certificate of occupancy issued under the provisions of this code whenever the certificate is issued in error, or on the basis of incorrect information supplied, or when it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code. (Ord. 17996 §14; May 13, 2002).

20.10.150 Section R111 Deleted; Service Utilities.

Section R111 of the International Residential Code and all subsections thereof are hereby deleted. (Ord. 17996 §15; May 13, 2002).

20.10.160 Section R112 Amended; Board of Appeals.

Section R112 of the International Residential Code is amended to read as follows:

SECTION R112 – BOARD OF APPEALS

R112.1 Building Code Board of Appeals. The appeals board adopted under Lincoln Municipal Code §20.08.140 pursuant to Section 112 of the International Building Code as amended by the City of Lincoln, shall serve as the appeals board for this code.

R112.2 Limitations on authority - Deleted.

R112.2.1 Determination of substantial improvement in acres prone to flooding - Deleted.

R112.2.2 Criteria for issuance of a variance for areas prone to flooding - Deleted.

R112.3 Qualifications - Deleted.

R112.4 Administration - Deleted.

(Ord. 17996 §16; May 13, 2002).

20.10.170 Section R113.4 Amended; Violation Penalties.

Section R113.4 of the International Residential Code is amended to read as follows:

R113.4 Violation penalties. Any person, firm, or corporation who shall violate any of the provisions of this code shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in any sum not to exceed $500.00, or be imprisoned in the county jail for a period not to exceed six months, or by both such fine and imprisonment, except that each person so convicted shall be fined in a sum of not less than $200.00 for the first offense, not less than $250.00 for the second offense, and not less than $300.00 for the third offense and each offense thereafter. Each day that such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such hereunder. (Ord. 17996 §17; May 13, 2002).

20.10.180 Section R115 Added; Demolition of Buildings.

Section R115 is added to the International Residential Code to read as follows:

SECTION R115 – DEMOLITION OF BUILDINGS

R115.1 General. Demolition of buildings shall comply with Section 3303 of the International Building Code as adopted by the City of Lincoln in the Lincoln Municipal Code. Demolition permits must start in thirty days and be completed in sixty days with the building official having the ability to extend an additional thirty days. (Ord. 17996 §18; May 13, 2002).

20.10.190 Section R202 Amended; Definitions.

Section R202 of the International Residential Code is amended to read as follows:

SECTION R202 – DEFINITIONS

ACCESSIBLE. Signifies access that requires the removal of an access panel or similar removable obstruction.

ACCESSIBLE, READILY. Signifies access without the necessity for removing a panel or similar obstruction.

ACCESSORY STRUCTURE. In one- and two-family dwellings not more than three stories high with separate means of egress, a building, the use of which is incidental to that of the main building and which is located on the same lot.

ADDITION. An extension or increase in floor area or height of a building or structure.

ALTERATION. Any construction or renovation to an existing structure other than repair or addition that requires a permit. Also, a change in a mechanical system that involves an extension, addition or change to the arrangement, type or purpose of the original installation that requires a permit.

ANCHORS. See "Supports."

APPLIANCE. A device or apparatus that is manufactured and designed to utilize energy and for which this code provides specific requirements.

APPROVED. Approved refers to approval by the building official as the result of investigation and tests conducted by him or her, or by reason of accepted principles or tests by nationally recognized organizations.

APPROVED AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the building official.

ATTIC. The unfinished space between the ceiling joists of the top story and the roof rafters.

BALCONY, EXTERIOR. An exterior floor projecting from and supported by a structure without additional independent supports.

BASEMENT. That portion of a building that is partly or completely below grade (see "Story above grade").

BASEMENT WALL. The opaque portion of a wall that encloses one side of a basement and has an average below grade wall area that is 50 percent or more of the total opaque and non-opaque area of that enclosing side.

BASIC WIND SPEED. Three-second gust speed at 33 feet (10 058 mm) above the ground in Exposure C (see Section R301.2.1) as given in Figure R301.2(4).

BOND BEAM. A horizontal grouted element within masonry in which reinforcement is embedded.

BRACED WALL LINE. A series of braced wall panels constructed in accordance with Section R602.10 for wood framing or Section R603.7 or R603.8.1.2 for cold-formed steel framing to resist racking from seismic and wind forces.

BRACED WALL PANEL. A section of a braced wall line constructed in accordance with Section R602.10 for wood framing or Section R603.7 or R603.8.1.2 for cold-formed steel framing, which extend the full height of the wall.

BUILDING. Building shall mean any one- and two-family dwelling or portion thereof, including townhouses, that is used, or designed or intended to be used for human habitation, for living, sleeping, cooking or eating purposes, or any combination thereof, and shall include accessory structures thereto.

BUILDING DRAIN. The lowest piping that collects the discharge from all other drainage piping inside the house and conveys it to the building sewer 30 inches (762 mm) outside the building wall.

BUILDING, EXISTING. Existing building is a building erected prior to the adoption of this code, or one for which a legal building permit has been issued.

BUILDING LINE. The line established by law, beyond which a building shall not extend, except as specifically provided by law.

BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code.

BUILDING SEWER. That part of the drainage system that extends from the end of the building drain and conveys its discharge to a public sewer, private sewer, individual sewage-disposal system or other point of disposal.

BUILDING THERMAL ENVELOPE. The basement walls, exterior walls, floor, roof and any other building element that enclose conditioned spaces.

BUILT-UP ROOF COVERING. Two or more layers of felt cemented together and surfaced with a cap sheet, mineral aggregate, smooth coating or similar surfacing material.

CEILING HEIGHT. The clear vertical distance from the finished floor to the finished ceiling.

CHIMNEY. A primary vertical structure containing one or more flues, for the purpose of carrying gaseous products of combustion and air from a fuel-burning appliance to the outside atmosphere.

CHIMNEY CONNECTOR. A pipe that connects a fuel-burning appliance to a chimney.

CHIMNEY TYPES. Residential-type appliance. An approved chimney for removing the products of combustion from fuel-burning, residential-type appliances producing combustion gases not in excess of 1,000°F (538°C) under normal operating conditions, but capable of producing combustion gases of 1,400°F (760°C) during intermittent forces firing for periods up to 1 hour. All temperatures shall be measured at the appliance flue outlet. Residential-type appliance chimneys include masonry and factory-built types.

CLADDING. The exterior materials that cover the surface of the building envelope that is directly loaded by the wind.

CLOSET. A small room or chamber used for storage.

COMBUSTIBLE MATERIAL. Any material not defined as noncombustible.

CONDITIONED SPACE. For energy purposes, space within a building that is provided with heating and/or cooling equipment or systems capable of maintaining, through design or heat loss/gain, 50°F (10°C) during the heating season and 85°F (29°C) during the cooling season, or communicates directly with a conditioned space. For mechanical purposes, an area, room or space being heated or cooled by any equipment or appliance.

CONSTRUCTION DOCUMENTS. Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit. Construction drawings shall be drawn to an appropriate scale.

CORROSION RESISTANT. Any nonferrous metal or any metal having an unbroken surfacing of nonferrous metal, or steel with not less than 10-percent chromium or with not less than 0.20-percent copper.

COURT. A space, open and unobstructed to the sky, located at or above grade level on a lot and bounded on three or more sides by walls or a building.

CROSS CONNECTION. Any connection between two otherwise separate piping systems whereby there maybe a flow from one system to the other.

DALLE GLASS. A decorative composite glazing material made of individual pieces of glass that are embedded in a cast matrix of concrete or epoxy.

DEAD LOADS. The weight of all materials of construction incorporated into the building, including but not limited to walls, floors, roofs, ceilings, stairways, built-in partitions, finishes, cladding, and other similarly incorporated architectural and structural items, and fixed service equipment.

DECK. An exterior floor system supported on at least two opposing sides by an adjoining structure and/or posts, piers, or other independent supports.

DECORATIVE GLASS. A carved, leaded or Dalle glass or glazing material whose purpose is decorative or artistic, not functional; whose coloring, texture or other design qualities or components cannot be removed without destroying the glazing material; and whose surface, or assembly into which it is incorporated, is divided into segments.

DESIGN PROFESSIONAL. See definition of "Registered design professional."

DIAMETER. Unless specifically stated, the term "diameter" is the nominal diameter as designated by the approved material standard.

DIAPHRAGM. A horizontal or nearly horizontal system acting to transmit lateral forces to the vertical resisting elements. When the term "diaphragm" is used, it includes horizontal bracing systems.

DRAFT STOP. A material, device or construction installed to restrict the movement of air within open spaces of concealed areas of building components such as crawl spaces, floor-ceiling assemblies, roof-ceiling assemblies and attics.

DUCT SYSTEM. A continuous passageway for the transmission of air which, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling equipment and appliances.

DWELLING. Any building that contains one or two dwelling units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

DWELLING UNIT. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

EMERGENCY ESCAPE AND RESCUE OPENING. An operable window, door or similar device that provides for a means of escape and access for rescue in the event of an emergency.

EQUIPMENT. All piping, ducts, vents, control devices and other components of systems other than appliances that are permanently installed and integrated to provide control of environmental conditions for buildings. This definition shall also include other systems specifically regulated in this code.

EXTERIOR INSULATION FINISH SYSTEMS (EIFS). Synthetic stucco cladding systems typically consisting of five layers: adhesive, insulation board, base coat into which fiberglass reinforcing mesh is embedded, and a finish coat in the desired color.

EXTERIOR WALL. An above-grade wall enclosing conditioned space. Includes between floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof, and basement walls with an average below grade wall area that is less than 50 percent of the total opaque and nonopaque area of that enclosing side.

FACTORY-BUILT CHIMNEY. A listed and labeled chimney composed of factory-made components assembled in the field in accordance with the manufacturer's instructions and the conditions of the listing.

FENESTRATION. Skylights, roof windows, vertical windows (whether fixed or moveable); opaque doors; glazed doors; glass block; and combination opaque/glazed doors.

FIRE BLOCKING. Building materials installed to resist the free passage of flame to other areas of the building through concealed spaces.

FIREPLACE. An assembly consisting of a hearth and fire chamber of noncombustible material and provided with a chimney, for use with solid fuels.

Factory-built fireplace. A listed and labeled fireplace and chimney system composed of factory-made components, and assembled in the field in accordance with manufacturer's instructions and the conditions of the listing.

Masonry chimney. A field-constructed chimney composed of solid masonry units, bricks, stones or concrete.

Masonry fireplace. A field-constructed fireplace composed of solid masonry units, bricks, stones or concrete.

FIREPLACE STOVE. A free-standing, chimney-connected solid-fuel-burning heater designed to be operated with the fire chamber doors in either the open or closed position.

FIREPLACE THROAT. The opening between the top of the firebox and the smoke chamber.

FIRE SEPARATION DISTANCE. The distance measured from the building face to the closest interior lot line, to the centerline of a street, alley or public way, or to an imaginary line between two buildings on the property. The distance shall be measured at right angles from the lot line.

FLAME SPREAD. The propagation of flame over a surface.

FLAME SPREAD INDEX. The numeric value assigned to a material tested in accordance with ASTM E 84.

FOAM PLASTIC INSULATION. A plastic that is intentionally expanded by the use of a foaming agent to produce a reduced-density plastic consisting open or closed cells distributed throughout the plastic and that has a density less than 20 pounds per cubic foot (320 kg/m^3).

GLAZING AREA. The interior surface area of all glazed fenestration, including the area of sash, curbing or other framing elements, that enclose conditioned space. Includes the area of glazed fenestration assemblies in walls bounding conditioned basements.

GRADE. The finished ground level adjoining the building at all exterior walls.

GRADE FLOOR OPENING. A window or other opening located such that the sill height of the opening is not more than 44 inches (1118 mm) above or below the finished ground level adjacent to the opening.

GRADE PLANE. A reference plane representing the average of the finished ground level adjoining the building at all exterior walls.

GROSS AREA OF EXTERIOR WALLS. The normal projection of all exterior walls, including the area of all windows and doors installed therein.

GUARD. A building component or a system of building components located near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to the lower level.

HABITABLE SPACE. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

HANDRAIL. A horizontal or sloping rail intended for grasping by the hand for guidance or support.

HANGERS. See "Supports."

HAZARDOUS LOCATION. Any location considered to be a fire hazard for flammable vapors, dust, combustible fibers or other highly combustible substances.

HEIGHT, BUILDING. The vertical distance from grade plane to the average height of the highest roof surface.

HEIGHT, STORY. The vertical distance from top to top of two successive tiers of beams or finished floor surfaces; and, for the topmost story, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to the top of the roof rafters.

HURRICANE-PRONE REGIONS. Areas vulnerable to hurricanes, defined as the U.S. Atlantic Ocean and Gulf of Mexico coasts where the basic wind speed is greater than 110 miles per hour (177 km/h), and Hawaii, Puerto Rico, Guam, Virgin Islands, and America Samoa.

INSULATING CONCRETE FORM (ICF). A concrete forming system using stay-in-place forms of rigid foam plastic insulation, a hybrid of cement and foam insulation, a hybrid of cement and wood chips, or other insulating material for constructing cast-in-place concrete walls.

INSULATING SHEATHING. An insulating board having a minimum thermal resistance of R-2 of the core material.

JURISDICTION. The governmental unit that has adopted this code under due legislative authority.

KITCHEN. Kitchen shall mean an area used, or designated to be used, for the preparation of food.

LIGHT-FRAMED CONSTRUCTION. A type of construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or light gage steel framing membranes.

LIVE LOADS. Those loads produced by the use and occupancy of the building or other structure and do not include construction or environmental loads such as wind load, snow load, rain load, earthquake load, flood load or dead load.

LIVING SPACE. Space within a dwelling unit utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes.

LOT. A portion or parcel of land considered as a unit.

LOT LINE. A line dividing one lot from another, or from a street or any public place.

MAIN. The principal pipe artery to which branches may be connected.

MANUFACTURED HOME. Manufactured home means a structure, transportable in one or more sections, which in the traveling mode is 8 body feet (2438 body mm)or more in width or 40 body feet (12 192 body mm) or more in length, or, when erected on site, is 320 square feet (30 m^2) or more, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning and electrical systems contained therein; except that such term shall include any structure that meets all the requirements of this paragraph except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the secretary (HUD) and complies with the standards established under this title. For mobile homes built prior to June 15, 1976, a label certifying compliance to the Standard for Mobile Homes, NFPA 501, in effect at the time of manufacture is required. For the purpose of these provisions, a mobile home shall be considered a manufactured home.

MASONRY CHIMNEY. A field-constructed chimney composed of solid masonry units, bricks, stones or concrete.

MASONRY, SOLID. Masonry consisting of solid masonry units laid contiguously with the joints between the units filled with mortar**.**

MASONRY UNIT. Brick, tile, stone, glass block or concrete block conforming to the requirements specified in Section 2103 of the International Building Code.

Clay. A building unit larger in size than a brick, composed of burned clay, shale, fire clay or mixtures thereof.

Concrete. A building unit or block larger in size than 12 inches by 4 inches by 4 inches (305 mm by 102 mm by 102 mm) made of cement and suitable aggregates.

Glass. No-load-bearing masonry composed of glass units bonded by mortar.

Hollow. A masonry unit whose net cross-sectional area in any plane parallel to the load-bearing surface is less than 75 percent of its gross cross-sectional area measured in the same plane.

Solid. A masonry unit whose net cross-sectional area in every plane parallel to the load-bearing surface is 75 percent or more of its cross-sectional area measured in the same plane.

MASS WALL. Masonry or concrete walls having a mass greater than or equal to 30 pounds per square foot (146 kg/m^2), solid wood walls having a mass greater than or equal to 20 pounds per square foot (98 kg/m^2), and any other walls having a heat capacity greater than or equal to 6 $Btu/ft^2°F$ [266 $J/(m^2 \cdot k)$].

MEAN ROOF HEIGHT. The average of the roof eave height and the height to the highest point on the roof surface, except that eave height shall be used for roof angle of less than or equal to 10 degrees (0.18 rad).

METAL ROOF PANEL. An interlocking metal sheet having a minimum installed weather exposure of at least 3 square feet (0.28 m^2) per sheet.

METAL ROOF SHINGLE. An interlocking metal sheet having an installed weather exposure less than 3 square feet (0.28 m^2) per sheet.

MEZZANINE, LOFT. An intermediate level or levels between the floor and ceiling of any story with an aggregate floor area of not more than one-third of the area of the room or space in which the level or levels are located.

MODIFIED BITUMEN ROOF COVERING. One or more layers of polymer modified asphalt sheets. The sheet materials shall be fully adhered or mechanically attached to the substrate or held in place with an approved ballast layer.

MULTIPLE STATION SMOKE ALARM. Two or more single station alarm devices that are capable of interconnection such that actuation of one causes all integral or separate audible alarms to operate.

NONCOMBUSTIBLE MATERIAL. Materials that pass the test procedure for defining noncombustibility of elementary materials set forth in ASTM E 136.

NONCONDITIONED SPACE. A space that is not a conditioned space by insulated walls, floors or ceilings.

OCCUPIED SPACE. The total area of all buildings or structures on any lot or parcel of ground projected on a horizontal plane, excluding permitted projections as allowed by this code.

OWNER. Any person, agent, firm or corporation having a legal or equitable interest in the property.

PERMIT. An official document or certificate issued by the authority having jurisdiction that authorizes performance of a specified activity.

PERSON. An individual, heirs, executors, administrators or assigns, and also includes a firm, partnership or corporation, its or their successors or assigns, or the agent of any of the aforesaid.

PITCH. See "Slope."

PLATFORM CONSTRUCTION. A method of construction by which floor framing bears on load bearing walls that are not continuous through the story levels or floor framing.

POSITIVE ROOF DRAINAGE. The drainage condition in which consideration has been made for all loading deflections of the roof deck, and additional slope has been provided to ensure drainage of the roof within 48 hours of precipitation.

PUBLIC SEWER. A common sewer directly controlled by public authority.

PUBLIC WATER MAIN. A water-supply pipe for public use controlled by public authority.

PUBLIC WAY. Any street, alley or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated or otherwise permanently appropriated to the public for public use and that has a clear width and height of not less than 10 feet (3048 mm).

R-VALUE, THERMAL RESISTANCE. The inverse of the time rate of heat flow through a building thermal envelope element from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady state conditions, per unit area ($h \cdot ft^2 °F/Btu$).

RAMP. A walking surface that has a running slope steeper than 1 unit vertical in 20 units horizontal (5-percent slope).

REGISTERED DESIGN PROFESSIONAL. An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

REPAIR. The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

REROOFING. The process of recovering or replacing an existing roof covering. See "Roof recover."

RESIDENTIAL BUILDING TYPE. The type of residential building for determining building thermal envelope criteria. Detached one- and two-family dwellings are Type A-1. Townhouses are Type A-2.

ROOF ASSEMBLY. A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly includes the roof deck, vapor retarder, substrate or thermal barrier, insulation, vapor retarder, and roof covering.

ROOF COVERING. The covering applied to the roof deck for weather resistance, fire classification or appearance.

ROOF COVERING SYSTEM. See "Roof assembly."

ROOF DECK. The flat or sloped surface not including its supporting members or vertical supports.

ROOF RECOVER. The process of installing an additional roof covering over a prepared existing roof covering without removing the existing roof covering.

ROOF REPAIR. Reconstruction or renewal of any part of an existing roof for the purposes of its maintenance.

ROOFTOP STRUCTURE. An enclosed structure on or above the roof of any part of a building.

RUNNING BOND. The placement of masonry units such that head joints in successive courses are horizontally offset at least one-quarter the unit length.

SCUPPER. An opening in a wall or parapet that allows water to drain from a roof.

SEISMIC DESIGN CATEGORY. A classification assigned to a structure based on its Seismic Group and the severity of the design earthquake ground motion at the site.

SHALL. The term, when used in the code, is construed as mandatory.

SHEARWALL. A general term for walls that are designed and constructed to resist racking from seismic and wind by use of masonry, concrete, cold-formed steel or wood framing in accordance with Chapter 6 of this code and the associated limitations in Section R301.2 of this code.

SINGLE PLY MEMBRANE. A roofing membrane that is field applied using one layer of membrane material (either homogeneous or composite) rather than multiple layers.

SINGLE STATION SMOKE ALARM. An assembly incorporating the detector, control equipment and alarm sounding device in one unit that is operated from a power supply either in the unit or obtained at the point of installation.

SKYLIGHT AND SLOPED GLAZING. See Section R308.6.1.

SLIP JOINT. A mechanical-type joint used primarily on fixture traps. The joint tightness is obtained by compressing a friction-type washer such as rubber, nylon, neoprene, lead or special packing material against the pipe by the tightening of a (slip) nut.

SMOKE-DEVELOPED RATING. A numerical index indicating the relative density of smoke produced by burning assigned to a material tested in accordance with ASTM E 84.

SOLAR HEAT GAIN COEFFICIENT (SHGC). The solar heat gain through a fenestration or glazing assembly relative to the incident solar radiation (Btu/h · ft^2°F).

SOLID MASONRY. Load-bearing or nonload-bearing construction using masonry units where the net cross-sectional area of each unit in any plane parallel to the bearing surface is not less than 75 percent of its gross cross-sectional area. Solid masonry units shall conform to ASTMC 55, C 62, C 73, C145 or C 216.

STACK BOND. The placement of masonry units in a bond pattern is such that head joints in successive courses are vertically aligned. For the purpose of this code, requirements for stack bond shall apply to all masonry laid in other than running bond.

STANDARD TRUSS. Any construction that does not permit the roof/ceiling insulation to achieve the required R-value over the exterior walls.

STORY. That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above.

STORY ABOVE GRADE. Any story having its finished floor surface entirely above grade, except that a basement shall be considered as a story above grade where the finished surface of the floor above the basement is:

1. More than 6 feet (1829 mm) above grade plane.
2. More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter.
3. More than 12 feet (3658 mm) above the finished ground level at any point.

STRUCTURAL INSULATED PANELS (SIPS). Factory fabricated panels of solid core insulation with structural skins of oriented strand board (OSB) or plywood.

THERMAL RESISTANCE, R-VALUE. The inverse of the time rate of heat flow through a body from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady state conditions, per unit area ($h \cdot ft^2 \cdot °F/Btu$).

THERMAL TRANSMITTANCE, U-FACTOR. The coefficient of heat transmission (air to air) through a building envelope component or assembly, equal to the time rate of heat flow per unit area and unit temperature difference between the warm side and cold side air films ($Btu/h \cdot ft^2 \cdot °F$).

TOWNHOUSE. A single-family dwelling unit constructed in a group of two or more attached units, each of which is constructed on an individually platted lot, in which each unit extends from foundation to roof and with open space on at least two sides.

TRIM. Picture molds, chair rails, baseboards, handrails, door and window frames, and similar decorative or protective materials used in fixed applications.

TRUSS DESIGN DRAWING. The graphic depiction of an individual truss, which describes the design and physical characteristics of the truss.

U-FACTOR, THERMAL TRANSMITTANCE. The coefficient of heat transmission (air to air) through a building envelope component or assembly, equal to the time rate of heat flow per unit area and unit temperature difference between the warm side and cold side air films ($Btu/h \cdot ft^2$ °F).

UNDERLAYMENT. One or more layers of felt, sheathing paper, nonbituminous saturated felt, or other approved material over which a s roof covering, with a slope of 2 to 12 (17-percent slope) or greater, is applied.

UNUSUALLY TIGHT CONSTRUCTION. Construction in which:

1. Walls and ceilings comprising the building thermal envelope have a continuous water vapor retarder with a rating of 1 perm [$57.4\ ng/(s \cdot m^2 \cdot Pa)$] or less with openings therein gasketed or sealed.
2. Storm windows or weatherstripping is applied around the threshold and jambs of opaque doors and openable windows.
3. Caulking or sealants are applied to areas such as joints around window and door frames between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines, and at other openings.

VAPOR RETARDER. A material having a permeance rating of 1.0 or less when tested in accordance with ASTM E 96.

VENTILATION. The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, any space.

WALLS. Walls shall be defined as follows:

Load-bearing wall is a wall supporting any vertical load in addition to its own weight.

Nonbearing wall is a wall which does not support vertical loads other than its own weight.

WIND BORNE DEBRIS REGION. Areas within hurricane-prone regions within one mile of the coastal mean high water line where the basic wind speed is 110 miles per hour (177 km/h) or greater; or where the basic wind speed is equal to or greater than 120 miles per hour (193 km/h); or Hawaii.

WOOD STRUCTURAL PANEL. A panel manufactured from veneers; or wood strands or wafers; bonded together with waterproof synthetic resins or other suitable bonding systems. Examples of wood structural panels are plywood, OSB or composite panels.

YARD. An open space, other than a court, unobstructed from the ground to the sky, except where specifically provided by this code, on the lot on which a building is situated. (Ord. 17996 §19; May 13, 2002).

20.10.200 Table No. R301.2(1) Amended; Climatic and Geographic Design Criteria.

Table No. R301.2(1) of the International Residential Code is amended to read as follows:

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND	SEISMIC DESIGN CATEGORY[f,g]	SUBJECT TO DAMAGE FROM				FLOOD HAZARDS[h]
	Speed[e] (mph)		Weathering[a]	Frost line depth[b]	Termite[c]	Decay[d]	
30 psf	80 mph	B	Severe	36”	Moderate to Heavy	Slight to Moderate	See LMC Ch. 27.55

All footnotes to Table No. R301.2(1) of this code shall apply. (Ord. 17996 §20; May 13, 2002).

20.10.210 Table R301.4 Amended; Minimum Uniformly Distributed Live Loads.

Table R301.4 of the International Residential Code is amended to read as follows:

TABLE R301.4
MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS
(in pounds per square foot)

USE	LIVE LOAD
Exterior balconies	60
Decks [f]	40
Fire escapes	40
Passenger vehicle garages [a]	50 [a]
Attics without storage [b,e]	10

USE	LIVE LOAD
Attics with storage [b,e]	20
Rooms other than sleeping rooms	40
Sleeping rooms	40
Stairs	40 [c]
Guardrails and handrails [d]	200

For SI: 1 pound per square foot = 0.0479 kN/m 2 , 1 square inch = 645 mm 2 , 1 pound = 4.45 N.

All footnotes to Table No. R301.4 of this code shall apply. (Ord. 17996 §21; May 13, 2002).

20.10.220 Table R301.6 Amended; Allowable Deflection of Structural Members.

Table R301.6 of the International Residential Code is amended to read as follows:

TABLE R301.6
ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS

STRUCTURAL MEMBER	ALLOWABLE DEFLECTION
Rafters having slopes greater than 3/12 with no finished ceiling attached to rafters	L/180
Interior walls and partitions	H/180
All other structural members L/240	L/240
Exterior walls with plaster or stucco finish	H/360
Exterior walls ─wind loads[a] with brittle finishes	L/240
Exterior walls—wind loads[a] with flexible finishes	L/120
Floors – 16'6" or less	L/360
Floors over 16'6" span	L/480

Note: L = span length, H = span height.

a. The wind load shall be permitted to be taken as 0.7 times the Component and Cladding loads for the purpose of the determining deflection limits herein.

(Ord. 17996 §22; May 13, 2002).

20.10.230 Section R302.1 Exception Amended; Exterior Walls.

The Exception of Section R302.1 of the International Residential Code is amended to read as follows:

Exception: Fire resistance and opening protection may be omitted for exterior walls of one story detached accessory buildings used as tool sheds, storage sheds, play houses, and similar uses; provided, the floor area of such buildings does not exceed 120 square feet. (Ord. 17996 §23; May 13, 2002).

20.10.240 Section R303.1 Exception 2 Amended; Habitable Rooms.

Exception 2 of Section R303.1 of the International Residential Code is amended to read as follows:

2. The glazed areas shall not be required to be provided in habitable rooms in basements except for bedrooms where Exception 1 above is satisfied and artificial light is provided capable of producing an average illumination of 6 foot candles (6.46 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level. (Ord. 17996 §24; May 13, 2002).

20.10.250 Section R303.3 Amended; Bathrooms.

Section R303.3 of the International Residential Code is amended to read as follows:

R303.3 Bathrooms. Bathrooms, water closet compartments, laundry rooms, and other similar rooms shall be provided with a mechanical ventilation system. The minimum ventilation rates shall be 50 cfm (23.6 L/s) for intermittent ventilation or 20 cfm (9.4 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

Exception: Bathrooms which contain only a water closet or lavatory or combination thereof, and similar rooms may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air. (Ord. 17996 §25; May 13, 2002).

20.10.260 Section R305 Amended; Ceiling Heights.

Section R305 of the International Residential Code is amended to read as follows:

SECTION R305 – CEILING HEIGHT

R305.1 Ceiling Heights. Habitable space shall have a ceiling height of not less than 7 feet 6 inches (2286 mm) except as otherwise permitted in this section. Kitchens, halls, bathrooms, and toilet compartments may have a ceiling height of not less than 7 feet (2134 mm) measured to the lowest projection from the ceiling. Where exposed beam ceiling members are spaced at less than 48 inches (1219 mm) on center, ceiling height shall be measured to the bottom of the deck supported by these members. Where exposed beam ceiling members are spaced at 48 inches (1219 mm) or more on center, ceiling height shall be measured to the bottom of the deck supported by these members, provided that the bottom of the members is not less than 7 feet (2134 mm) above the floor.

If any room in a building has a sloping ceiling, the prescribed ceiling height for the room is required in only one-half the area thereof. No portion of the room measuring less than 5 feet (1524 mm) from the finished floor to the finished ceiling shall be included in any computation of the minimum area thereof.

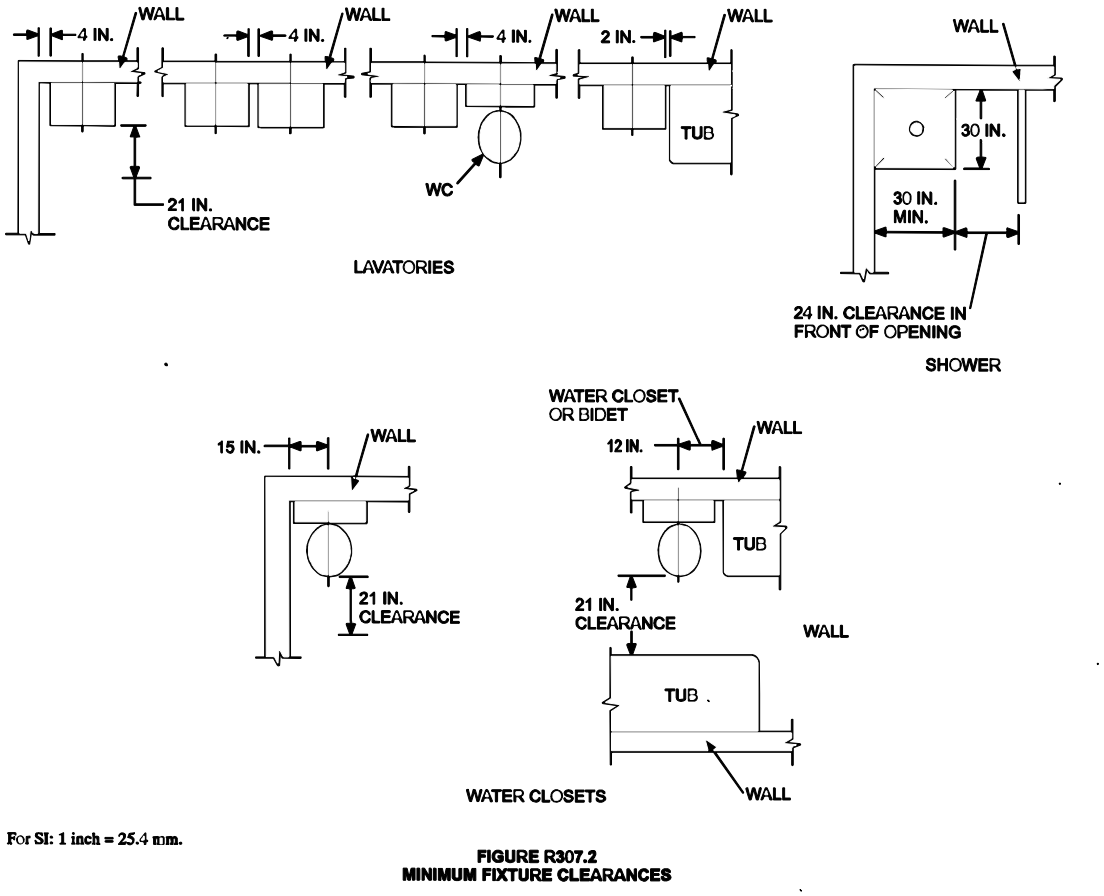
If any room has a furred ceiling, the prescribed ceiling height is required in two-thirds the area thereof, but in no case shall the height of the furred ceiling be less than 7 feet (2134 mm).

Exception: The ceiling height of a habitable room in basements within a single family dwelling may be reduced to accommodate existing floor joists, but in no case shall the finished ceiling height be less than 7 feet (2134 mm). Beamed and furred ceilings under ducts or piping shall have a ceiling height of not less than 6 feet 6 inches (1981 mm) and shall not exceed 1/3 of the total

ceiling area of the room. When ceilings are constructed to such minimum heights as herein described, no fixtures or other appurtenances shall project below such ceiling heights. Connecting hallways in such basements shall have a ceiling height of not less than 6 feet 10 inches (2083 mm). (Ord. 17996 §26; May 13, 2002).

20.10.270 Figure R307.2 Amended; Minimum Fixture Clearances.

Figure R307.2 of the International Residential Code is amended to read as follows:



For SI: 1 inch = 25.4 mm.

FIGURE R307.2
MINIMUM FIXTURE CLEARANCES

(Ord. 17996 §27: May 13, 2002).

20.10.280 Section R309.2 Amended; Separation Required.

Section 309.2 of the International Residential Code is amended to read as follows:

R309.2 Separation required. The garage shall be separated from the residence and its attic area by not less than 5/8-inch (15.9 mm) type X gypsum board applied to the garage side only. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than 5/8-inch (15.9 mm) type X gypsum board applied to the garage side only. (Ord. 17996 §28: May 13, 2002).

20.10.290 Section R309.6 Added; Headroom Clearance.

Section R309.6 is added to the International Residential Code to read as follows:

R309.6 Headroom clearance. Any portion of a garage shall have an unobstructed headroom clearance of not less than 6 feet 6 inches (1981 mm) above the finished floor to any ceiling, beam, pipe, or similar construction except for wall-mounted shelves, storage surfaces, racks, or cabinets. (Ord. 17996 §29; May 13, 2002).

20.10.300 Section R310.1 Amended; Emergency Escape and Rescue Required.

Section R310.1 of the International Residential Code is amended to read as follows:

R310.1 Emergency escape and rescue required. Every sleeping room shall have at least one operable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Basement rooms with a closet or direct access to a bathroom shall also comply with this requirement. Where openings are provided as a means of escape and rescue, they shall have a sill height not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the window or door opening from the inside. Escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. (Ord. 17996 §30; May 13, 2002).

20.10.310 Section R310.1.1 Exception Deleted; Minimum Opening.

The Exception to Section R310.1.1 of the International Residential Code is hereby deleted. (Ord. 17996 §31; May 13, 2002).

20.10.320 Section R310.3 Amended; Bulkhead Enclosures.

Section R310.3 of the International Residential Code is amended to read as follows:

R310.3 Bulkhead enclosures. Bulkhead enclosures shall provide direct access only to furnace, water heater, and other mechanical, plumbing and electrical equipment. The bulkhead enclosure with the door panels in the fully open position shall provide the minimum net clear opening required by Section R310.1.1. (Ord. 17996 §32; May 13, 2002).

20.10.330 Section R312.1.2 Amended; Landings at Doors.

Section R312.1.2 of the International Residential Code is amended to read as follows:

R312.1.2 Landings at doors. There shall be a floor or landing on each side of each exterior door.

Exceptions:

1. A door may open at a landing that is not more than 8 inches (203 mm) lower than the floor level, provided the door does not swing over the landing.
2. Screen doors and storm doors may swing over stairs, steps, or landings.
3. A utility door in a garage that is not used as an entry door to the home but a door to the patio or rear yard may swing over an 8-inch (203 mm) step provided the grade or patio on the outside provides a landing on that side of the door.
4. A landing is not required for stairs of less than four risers. (Ord. 17996 §33; May 13, 2002).

20.10.340 Section R314 Amended; Stairways.

Section R314 of the International Residential Code is amended to read as follows:

SECTION R314 - STAIRWAYS

R314.1 Width. Stairways shall not be less than 36 inches (914 mm) in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4.5 inches (114 mm) on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including treads and landings, shall not be less than 31.5 inches (787 mm) where a handrail is installed on one side and 27 inches (698 mm) where handrails are provided on both sides. Stairways serving a loft of less than 300 square feet in a room within a individual dwelling unit, may not be less than 24 inches (610 mm) in width.

Exceptions:

1. The width of spiral stairways shall be in accordance with Section R314.5.

2: Private stairways for exterior decks, basements, lofts, or attics may be 30 inches (762 mm) in width provided the minimum clear width at and below the railing shall not be less than 26 inches (660 mm). Stringers and other projections such as trim and similar decorative features may project into the required width 1 1/2 inches (38 mm) on each side.

R314.2 Treads and risers. The maximum riser height shall be 8 inches (203 mm) and the minimum tread depth shall be 9 inches (229 mm). The riser height shall be measured vertically between leading edges of the adjacent treads. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The walking surface of treads and landings of a stairway shall be sloped no steeper than one unit vertical in 48 units horizontal (2-percent slope). The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3 /8 inch (9.5 mm). The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3 /8 inch (9.5 mm).

R314.2.1 Profile. The radius of curvature at the leading edge of the tread shall be no greater than 9/16 inch (14.3 mm). A nosing not less than 3 /4 inch (19.1 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3 /8 inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosing shall not exceed 1/2 inch (12.7 mm).Risers shall be vertical or sloped from the underside of the leading edge of the tread above at an angle not more than 30 degrees from the vertical. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch-diameter (102 mm) sphere. Stair treads shall be reasonably level with consideration given to shed water, snow and ice.

Exceptions:

1. A nosing is not required where the tread depth is a minimum of 10 inches (254 mm).

2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

R314.3 Headroom. The minimum headroom in all parts of the stairway shall not be less than 6 feet 8 inches (2032 mm) measured vertically from the sloped plane adjoining the tread nosing or from the floor surface of the landing or platform.

Exception: When demonstrated to the building official there are practical difficulties in achieving 6 feet 8 inches (2032 mm) headroom, a minimum of 6 feet 6 inches (1981 mm) headroom may be allowed.

R314.4 Winders. Winders are permitted if the required width of run is provided at a point not more than 12 inches (305 mm) from the side of the stairway where the treats are narrower, but

in no case shall the width of run be less than 6 inches (152 mm) at any point. Winding stairways shall also include circular stairways.

R314.5 Spiral stairs. Spiral stairways are permitted, provided the minimum width shall be 26 inches (660 mm) with each tread having a 7 1/2-inch (190 mm) minimum tread width at 12 inches (305 mm) from the narrow edge. All treads shall be identical, and the rise shall be no more than 9 1/2 inches (241 mm). A minimum headroom of 6 feet, 6 inches (1982 mm) shall be provided.

R314.6 Circular Stairways - Deleted.

R314.7 Illumination. All stairs shall be provided with illumination in accordance with Section R303.4.

R314.8 Under stair protection. Enclosed accessible space under stairs shall have walls, under stair surface and any soffits protected on the enclosed side with 1 /2 -inch (12.7 mm)gypsum board.

R314.9 Bulkhead enclosure stairways. Stairways serving enclosures providing access to mechanical, electrical, or plumbing equipment shall be exempt from Section R312. (Ord. 17996 §34; May 13, 2002).

20.10.350 Section R315 Amended; Handrails.

Section R315 of the International Residential Code is amended to read as follows:

SECTION R315 – HANDRAILS

R315.1 Handrails. Handrails having minimum and maximum heights of 30 inches and 38 inches (762 mm and 965 mm), respectively, measured vertically from the nosing of the treads, shall be provided on at least one side of stairways. All required handrails shall be continuous the full length of the stairs with more than three risers or extending 24 inches (610 mm) in height from a point directly above the top riser of a flight to a point directly above the lowest riser of the flight. Handrails adjacent to a wall shall have a space of not less than 1.5 inches (38 mm)between the wall and the handrail.

Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post at a turn.
2. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.

R315.2 Handrail grip size. The handgrip portion of handrails shall have a circular cross section of 1 1/4 inches (32 mm) minimum to 2 5/8 inches (67 mm) maximum. Other handrail shapes that provide an equivalent grasping surface are permissible. Edges shall have a minimum radius of 1/8 inch (3.2 mm). On exterior stairs on individual dwelling units, the handrail may consist of a 1 1/2 inch (38 mm) thick by a 3 1/2 inch (89 mm) wide piece mounted in the horizontal or vertical dimension. (Ord. 17996 §35; May 13, 2002).

20.10.360 Section R317.1 Amended; Single- and Multiple-Station Smoke Alarms.

Section R317.1 of the International Residential Code is amended to read as follows:

R317.1 Single- and multiple-station smoke alarms. Single- and multiple-station smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. On each story of the dwelling, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

All smoke alarms shall be listed and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72. (Ord. 17996 §36; May 13, 2002).

20.10.370 Section R321.1Amended; Two-family Dwellings.

Section R321.1 of the International Residential Code is amended to read as follows:

R321.1 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by wall and/or floor assemblies of not less than 1-hour fire-resistive rating when tested in accordance with ASTM E 119. Fire-resistance-rated floor-ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend to the underside of the roof sheathing.

Exceptions:

1. A fire resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13.

2. Where the common wall of the dwelling units is located on a property line, the units shall be separated by fire resistance rated wall assemblies meeting the requirements of Section R302 for exterior walls. (Ord. 17996 §37; May 13, 2002).

20.10.380 Section R321.2 Amended; Townhouses.

Section R321.2 of the International Residential Code is amended to read as follows:

R321.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302 for exterior walls.

Exception: A common 2-hour fire-resistance-rated wall is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. Electrical installations shall be installed in accordance with Chapter 23.10 of the Lincoln Municipal Code. Penetrations of electrical outlet boxes shall be in accordance with Section R321.3. Structural independence must be provided as required in Section R321.2.4. (Ord. 17996 §38; May 13, 2002).

20.10.390 Section R321.2.2 Amended; Parapets.

Section R321.2.2 of the International Residential Code is amended to read as follows:

R321.2.2 Parapets. Parapets constructed in accordance with Section R321.2.3 shall be provided for townhouses as an extension of common exterior or walls in accordance with the following:

1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 30 inches (762 mm) above the roof surfaces.

2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches (762 mm) above the lower roof, the parapet shall extend not less than 30 inches (762 mm)above the lower roof surface.

Exception: A parapet is not required in the two cases above when the roof is covered with a minimum class B roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall

or walls, or one layer of 5/8 -inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing for a distance of 4 feet (1219 mm) on each side of the wall or walls; or one layer of 5/8-inch (15.9 mm) Type X gypsum board is installed on the entire ceiling directly below the attic space. Openings in the roof shall not be located within 5 feet of the fire-resistance-rated wall assemblies to meet this exception.

3. A parapet is not required where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is more than 30 inches (762 mm) above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall not have less than a 1-hour fire-resistive rating. The wall shall be rated for exposure from both sides. (Ord. 17996 §39; May 13, 2002).

20.10.400 Section R321.2.4 Exception 5 Deleted; Structural Independence.

Exception 5 to Section R321.2.4 of the International Residential Code is hereby deleted. (Ord. 17996 §40; May 13, 2002).

20.10.410 Section R322.1 Amended; Moisture Control.

Section R322.1 of the International Residential Code is amended to read as follows:

R322.1 Moisture control. In all framed walls and floors of the building thermal envelope, a vapor retarder shall be installed on the warm-in-winter side of the insulation.

Exceptions:

1. In construction where moisture or freezing will not damage the materials.

2. Where the framed cavity or space is ventilated to allow moisture to escape. (Ord. 17996 §41; May 13, 2002).

20.10.420 Section R323.1 Amended; Location Required.

Section R323.1 of the International Residential Code is amended to read as follows:

R323.1 Location required. In areas subject to decay damage as established by Figure R301.2(7), the following locations shall require the use of an approved species and grade of lumber, pressure preservatively treated in accordance with AWPA C1, C2, C3, C4, C9, C15, C18, C22, C23, C24, C28, P1, P2 and P3, or decay-resistant heartwood of redwood, black locust, or cedars.

1. Wood joists or the bottom of a wood structural floor when closer than 18 inches (457 mm) or wood girders when closer than 12 inches (305 mm) to exposed ground in crawl spaces or unexcavated area located within the periphery of the building foundation.

2. All foundation plates or sills and sleepers on a concrete or masonry slab, which is in direct contact with earth, and sills that rest on concrete or masonry foundations, shall be treated wood or foundation redwood, all marked or branded by an approved agency.

3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier.

4. The ends of wood girders entering exterior masonry or concrete walls having clearances of less than 0.5 inch (12.7 mm) on tops, sides and ends.

5. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches (152 mm) from the ground.

6. Wood structural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.

7. Wood furring strips or other wood framing members attached directly to the interior of exterior masonry walls or concrete walls below grade except where an approved vapor retarder is applied between the wall and the furring strips or framing members.

8. Bottom sill plates for bearing walls cannot be imbedded in concrete. (Ord. 17996 §42; May 13, 2002).

20.10.430 Section R323.1.3 Amended; Posts, Poles and Columns.

Section R323.1.3 of the International Residential Code is amended to read as follows:

R323.1.3 Posts, poles and columns. Posts, poles and columns supporting permanent structures shall bear upon a concrete footing and shall not be imbedded in the concrete or in the ground.. (Ord. 17996 §43; May 13, 2002).

20.10.440 Section R325.1 Amended; Premises Identification.

Section R325.1 of the International Residential Code is amended to read as follows:

R325.1 Premises identification. Premises shall have addressed provided on buildings as specified under Chapter 14.24 of the Lincoln Municipal Code. (Ord. 17996 §44; May 13, 2002).

20.10.450 Section R326 Deleted; Accessibility.

Section R326 of the International Residential Code and all subsections thereof are hereby deleted. (Ord. 17996 §45; May 13, 2002).

20.10.460 Section R327 Deleted; Flood-Resistant Construction.

Section R327 of the International Residential Code and all subsections thereof are hereby deleted. (Ord. 17996 §46; May 13, 2002).

20.10.470 Section R403.1.6 Exception Deleted; Foundation Anchorage.

The exception to Section R403.1.6 of the International Residential Code is hereby deleted. (Ord. 17996 §47; May 13, 2002).

20.10.480 Section R408.6 Deleted; Flood Resistance.

Section R408.6 of the International Residential Code is hereby deleted. (Ord. 17996 §48; May 13, 2002).

20.10.490 Section R502.3 Amended; Allowable Joist Spans.

Section R502.3 of the International Residential Code is amended to read as follows:

R502.3 Allowable joist spans. Spans for floor joists shall be in accordance with Table R502.3.1(2). For other grades and species and for other loading conditions, refer to the AF&PA Span Tables for Joists and Rafters.

R502.3.1 Sleeping areas and attic joists; Deleted.

R502.3.2 Other floor joists. Table R502.3.1(2) shall be utilized to determine the maximum allowable span of floor joists that support all areas of the building, provided that the design live load does not exceed 40 psf (1.92 kN/m^2) and the design dead does not exceed 10 psf (0.48 kN/m^2).

Table R502.3.1(1) Floor Joist Spans for Common Lumber Species; Deleted.

(Ord. 17996 §49; May 13, 2002).

20.10.500 Section R502.7 Amended; Lateral Restraint at Supports.

Section R502.7 of the International Residential Code is amended to read as follows:

R502.7 Lateral restraint at supports. Joists shall be supported laterally at the ends by full-depth solid blocking not less than 2 inches (51 mm) nominal in thickness; or by attachment to a header, band, or rim joist, or to an adjoining stud, or the floor sheathing and interior bearing partitions; or shall be otherwise provided with lateral support to prevent rotation.

Exception: In Seismic Design Categories D 1 and D2 , lateral restraint shall also be provided at each intermediate support.

R502.7.1 Bridging. Joists exceeding a nominal 2 by 8 dimensional lumber shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch (25.4 mm by 76 mm)strip nailed across the bottom of joists perpendicular to joists at intervals not exceeding 8 feet (2438 mm). (Ord. 17996 §50; May 13, 2002).

20.10.510 Section R502.10 Amended; Framing of Openings.

Section R502.10 of the International Residential Code is amended to read as follows:

R502.10 Framing of openings. Openings in floor framing shall be framed with a header and trimmer joists. When the header joist span does not exceed 4 feet (1219 mm), the header joist may be a single member the same size as the floor joist. Single trimmer joists may be used to carry a single header joist that is located within 3 feet (914 mm) of the trimmer joist bearing. When the header joist span exceeds 4 feet (1219 mm), the trimmer joists and the header joist shall be doubled and of sufficient cross section to support the floor joists framing into the header. Approved hangers shall be used for the header joist to trimmer joist connection. Tail joists over 12 feet (3658 mm) long shall be supported at the header by framing anchors or on ledger strips not less than 2 inches by 2 inches (51 mm by 51 mm). (Ord. 17996 §51; May 13, 2002).

20.10.520 Section R502.12 Amended; Draftstopping Required.

Section R502.12 of the International Residential Code is amended to read as follows:

R502.12 Draftstopping required. When there is usable space both above and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 3,000 square feet (278.7 m^2). Draftstopping shall divide the concealed space into approximately equal areas. Where the assembly is enclosed by a floor membrane above and a ceiling membrane below draftstopping shall be provided in floor/ceiling assemblies under the following circumstances:

1. Ceiling is suspended under the floor framing.
2. Floor framing is constructed of truss-type open-web or perforated members. Draft stop shall be installed prior to the framing inspection. (Ord. 17996 §52; May 13, 2002).

20.10.530 R602.8 Amended; Fireblocking Required.

Section R602.8 of the International Residential Code is amended to read as follows:

R602.8 Fireblocking required. Fireblocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space. Fireblocking shall be provided in wood-frame construction in the following locations:

1. In concealed spaces of stud walls and partitions, including furred spaces, at the ceiling and floor level and at 10 foot (3048 mm) intervals both vertical and horizontal. Batts or blankets of mineral or glass fiber or other approved non-rigid materials shall be allowed as fireblocking in walls constructed using parallel rows of studs or staggered studs.

2. Fireblocking of cornices of a two-family dwelling is required at the line of dwelling unit separation.

R602.8.1 Materials. Fireblocking shall consist of 2-inch (51 mm)nominal lumber, or two thicknesses of 1-inch (25.4 mm) nominal lumber with broken lap joints, or one thickness of 23 /32-inch (19.8 mm) wood structural panels with joints backed by 23/32-inch (19.8 mm) wood structural panels or one thickness of 3/4-inch (19.1 mm) particle board with joints backed by 3 /4 -inch (19.1 mm) particle board, 1/2-inch (12.7 mm) gypsum board, or 1/4-inch (6.4 mm) cement-based mill-board. Loose-fill insulation material shall not be used as a fire block unless specifically tested in the form and manner intended for use to demonstrate its ability to remain in place and to retard the spread of fire and hot gases.

R602.8.1.1 Fireblocking integrity. The integrity of all fireblocks shall be maintained. (Ord. 17996 §53; May 13, 2002).

20.10.540 Section R703.1 Amended; Exterior Covering; General.

Section R703.1 of the International Residential Code is amended to read as follows:

R703.1 General. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section R703.8. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water-resistive barrier behind the exterior veneer as required by Section R703.2.

Any deteriorated or rotting veneer shall be removed prior to installing new veneer. An approved weather barrier shall be installed over the existing wood exterior veneer prior to overlaying with a new veneer product. (Ord. 17996 §54; May 13, 2002).

20.10.550 Table R703.7.1 Deleted; Allowable Spans for Lintels Supporting Masonry Veneer.

Table R703.7.1 of the International Residential Code is hereby deleted. (Ord. 17996 §55; May 13, 2002).

20.10.560 Section R703.7.3 Amended; Lintels.

Section R703.7.3 of the International Residential Code is amended to read as follows:

R703.7.3 Lintels. Masonry veneer shall not support any vertical load other than the dead load of the veneer above. Veneer above openings shall be supported on lintels of non-combustible materials. The lintels shall have a length of bearing of not less than 4 inches (102 mm). (Ord. 17996 §56; May 13, 2002).

20.10.570 Section R703.7.4 Amended; Anchorage.

Section R703.7.4 of the International Residential Code is amended to read as follows:

R703.7.4 Anchorage. R703.7.4 Anchorage. Masonry veneer shall be anchored to the supporting wall with corrosion-resistant metal ties. Where veneer is anchored to wood backings through the use of corrugated sheet metal ties, the distance separating the veneer from the sheathing material shall be a maximum of 1 inch (25.4 mm). Where the veneer is anchored to wood backings through the use of metal strand wire ties, the distance separating the veneer from the sheathing material shall be a maximum of 4 1/2 inches (114 mm). Where the veneer is anchored to cold-formed steel backings, adjustable metal strand wire ties shall be used. Where veneer is anchored to cold-formed steel backings, the distance separating the veneer from the sheathing material shall be a maximum of 4.5 inches (114 mm).

Anchors, supports and ties shall be noncombustible and corrosion resistant. When the terms "corrosion resistant" or "noncorrosive" are used in this section, they shall mean having a corrosion resistance equal to or greater than a hot-dipped galvanized coating of 1.5 ounces of zinc per square foot (458 g/m^2) of surface area. When an element is required to be corrosive resistant or noncorrosive, all of its parts, such as screws, nails, wire, dowels, bolts, nuts, washers, shims, anchors, ties and attachments, shall be corrosion resistant. (Ord. 17996 §57; May 13, 2002).

20.10.580 Section R703.7.4.2 Amended; Air Space.

Section R703.4.2 of the International Residential Code is amended to read as follows:

R703.7.4.2 Air space. The veneer shall be separated from the sheathing by an air space of a minimum of 1/2 inch (12.7 mm). The weather resistant membrane or asphalt-saturated felt required by Section R703.2 is not required over water-repellent sheathing materials. (Ord. 17996 §58; May 13, 2002).

20.10.590 Figure R703.7 Deleted; Masonry Veneer Wall Details.

Figure R703.7 of the International Residential Code is hereby deleted. (Ord. 17996 §59; May 13, 2002).

20.10.600 R703.7.5 Amended; Stone and Masonry Veneer, General; Flashing.

Section R703.7.5 of the International Residential Code is amended to read as follows:

R703.7.5 Flashing. Flashing shall be located beneath the first course of masonry above finished ground level above the foundation wall or slab and at other points of support, including structural floors, shelf angles and lintels when masonry veneers are designed in accordance with Section R703.7. See Section R703.8 for additional requirements.

Exception: The requirements of R703.7.5 may be deleted if a poured concrete foundation is used with a minimum 7-inch (178 mm) brickledge drop and all exterior window and door openings are caulked with sealant. (Ord. 17996 §60; May 13, 2002).

20.10.610 Section R703.7.6 Amended; Weepholes.

Section R703.7.6 of the International Residential Code is amended to read as follows:

R703.7.6 Weepholes. Weepholes shall be provided in the outside wythe of masonry walls at a maximum spacing of 33 inches (838 mm) on center. Weepholes shall not be less than 3 /16 inch (4.8 mm) in diameter. Weepholes shall be located immediately above the flashing.

Exception: The requirements of R703.7.6 may be deleted if a poured concrete foundation is used with a minimum 7-inch (178 mm) brickledge drop and all exterior window and door openings are caulked with sealant. (Ord. 17996 §61; May 13, 2002).

20.10.620 Section R703.8 Amended; Flashing.

Section R703.8 of the International Residential Code is amended to read as follows:

R703.8 Flashing. Approved corrosion-resistive flashing shall be provided in the exterior wall envelope in such a manner as to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. The flashing shall extend to the surface of the exterior wall finish and shall be installed to prevent water from reentering the exterior wall envelope. Approved corrosion-resistant flashings shall be installed at all of the following locations:

1. At top of all exterior window and door openings in such a manner as to be leakproof, except that self-flashing windows having a continuous lap of not less than 1 1/8 inches (28 mm) over the sheathing material around the perimeter of the opening, including corners, do not require

additional flashing; jamb flashing may also be omitted when specifically approved by the building official.

2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.

3. Under and at the ends of masonry, copings and sills.

4. Continuously above all projecting wood or composite trim.

5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.

6. At wall and roof intersections.

7. At built-in gutters.

Exceptions:

1. The requirements of subparagraphs 1 and 3 above may be deleted if a poured concrete foundation is used with a minimum 7-inch (178 mm) brickledge drop and all exterior window and door openings are caulked with sealant.

2. Where exterior porches, decks, or stairs attach to the outside of a finished exterior wall (i.e. cementboard siding, wood siding, brick veneer, EIFS, etc., subparagraph 5 above may be deleted. This exception does not include vinyl or steel siding applications. (Ord. 17996 §62; May 13, 2002).

20.10.630 Section R703.9 Amended; Exterior Insulation Finish Systems, General.

Section R703.9 of the International Residential Code is amended to read as follows:

R703.9 Exterior insulation finish systems, general. All Exterior Insulation Finish Systems (EIFS) shall be installed in accordance with the manufacturer's installation instructions and the requirements of this section and shall be sealed at all exterior window and door openings. Decorative trim shall not be face nailed through the EIFS. The EIFS shall terminate not less than 6 inches (152 mm) above the finished ground level. (Ord. 17996 §63; May 13, 2002).

20.10.640 Section R903.1 Amended; Weather Protection, General.

Section R903.1 of the International Residential Code is amended to read as follows:

R903.1 General. Roof decks shall be covered with approved roof coverings secured to the building or structure in accordance with the provisions of this chapter. Roof assemblies shall be designed and installed in accordance with this code and the approved manufacturer's installation instructions such that the roof assembly shall serve to protect the building or structure. Any special conditions in this chapter that refer to the average daily temperature in January being 25 degrees Fahrenheit (-4 degrees Celsius) or less shall not apply. (Ord. 17996 §64; May 13, 2002).

20.10.650 Section R905.2.7.1 Deleted; Underlayment Application; Ice Protection.

Section R905.2.7.1 of the International Residential Code is hereby deleted. (Ord. 17996 §65; May 13, 2002).

20.10.660 Section R907.3 Amended; Reroofing; Recovering Versus Replacement.

Section R907.3 of the International Residential Code is amended to read as follows:

R907.3 Recovering versus replacement. New roof coverings shall not be installed without first removing existing roof coverings where any of the following conditions occur:

1. Where the existing roof or roof covering is water-soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.

2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos-cement tile.

3. Where the existing roof has two or more applications of any type of roof covering.

Exception: Subsequent roofing after two layers of shingles will require removal of all shingles to the base roof sheathing or structure. Up to three layers may be allowed if load calculations are approved by the building official. (Ord. 17996 §66; May 13, 2002).

20.10.670 Section R1001.8 Amended; Masonry Chimneys; Flue Lining (Material).

Section R1001.8 of the International Residential Code is amended to read as follows:

R1001.8 Flue lining (material). Masonry chimneys shall be lined. The lining material shall be appropriate for the type of appliance connected, according to the terms of the appliance listing and manufacturer's instructions.

R1001.8.1 - Deleted.

R1001.8.2 - Deleted.

R1001.8.3 - Deleted.

R1001.8.4 - Deleted.

R1001.8.5 - Deleted.

R1001.8.6 - Deleted.

(Ord. 17996 §67; May 13, 2002).

20.10.680 Section R1001.9.2 Deleted; Space Around Lining.

Section R1001.9.2 of the International Residential Code is hereby deleted. (Ord. 17996 §68; May 13, 2002).

20.10.690 Section R1001.11 and Tables Deleted; Flue Area (Appliance).

Section R1001.11 and Tables R1001.11(1) and R1001.11(2) of the International Residential Code are hereby deleted. (Ord. 17996 §69; May 13, 2002).

20.10.700 Chapter 11 Amended; Energy Code.

Chapter 11 of the International Residential Code is amended to read as follows:

CHAPTER 11

ENERGY CODE

SECTION 1100 – PURPOSE OF ENERGY CODE.

The purpose of this chapter is to provide minimum design requirements and criteria that will result in a more efficient utilization of energy by providing thermal design and insulation standards for building construction. Any references in this code to the International Energy Code shall comply with this section.

SECTION 1101 - ENERGY CODE - APPLICATION AND SCOPE.

1101.1 General. The requirements of this chapter shall apply to all new buildings and structures or portions thereof which are heated and/or mechanically cooled and afford facilities or residential occupancies as defined in this code as A-1 and A-2 occupancies and R-1, R-2, R-3, R-4, and I-1 occupancies as defined by the International Building Code.

1101.2 Alternate Materials, Method of Construction, Design or Insulating System. The provisions of this chapter are not intended to prevent the use of any material, method of construction, design or insulating system not specifically prescribed herein, provided that any such variance from these standards has been approved by the building official.

1101.3 Existing Buildings, Additions or Alterations. The provisions of this chapter are not intended to apply to existing buildings until such time as additions, alterations or repairs are made.

SECTION 1102 - -- ENERGY CODE - DEFINITIONS

For the purpose of this chapter, certain terms and words are hereby defined. Words used in the present tense shall include the future, the singular number shall include the plural.

APPROVED MECHANICAL ENGINEERED SYSTEM. The equipment and ductwork installed for the purpose of supplying air to, or removing air from, any room or space by mechanical means in accordance with the Lincoln Heating Code.

BASEMENT. Basement as described in Section R202 of this code.

BTU (British thermal unit). Approximately equal to the heat required to raise the temperature of one pound of water from fifty-nine degrees Fahrenheit to sixty degrees Fahrenheit.

BTUH. Heat flow in BTU per hour.

U-VALUE (co-efficient of heat transmission). Heat flow rate in BTUH through one foot of building assembly for a one degree Fahrenheit air-to-air temperature difference as determined by procedures set forth in the 1993 edition, ASHRAE handbook of fundamentals.

CONDITIONED SPACE. Interior space which is conditioned within the human comfort range by an energy-using system. A basement, crawl space, or garage is considered a conditioned space when it is provided with a positive heat supply to maintain a minimum temperature of fifty degrees.

CRAWL SPACE. Accessible underfloor area less than full story height and below a level of occupancy.

GLAZING. Glass or glass-like (plastic) material, which is transparent or translucent, a pane or sheet, which is installed in prepared openings such as doors, windows and enclosures.

EFFECTIVE SOUTH GLAZING. Glazing facing within fifteen degrees of true south, shaded by a permanent exterior shading device on July 21st and unshaded on December 21st.

HEATED SLAB. A floor containing heated pipes, ducts or electrical heating elements for complete or partial heating of the building.

INSULATION. A material installed specifically for thermal resistance.

RESISTANCE (thermal). A measure of the ability to retard heat flow, measured in Fahrenheit degrees per BTU/(hour) (square foot). R is a numerical reciprocal of U, thus R = 1/U. Thermal resistance values, based on mean temperature difference of seventy-five degrees Fahrenheit, shall be obtained from the most recent ASHRAE handbook of fundamentals or from manufacturer's data as determined by a recognized independent testing laboratory.

UNCONDITIONED SPACE. A space which is not conditioned within the human comfort range by an energy-using system. A basement, crawl space, or garage is considered unheated space unless it is provided with a positive heat supply to maintain a minimum temperature of fifty degrees.

UNHEATED SLAB. An unheated floor, relying for warmth from heat delivered above floor level by the heating system.

VAPOR BARRIER. A material with high resistance to the passage of water vapor applied to surfaces to prevent vapor travel and shall be a minimum actual thickness of 3 mil.

P.S.F. Pounds per square foot.

SECTION 1103 -- INSULATION REQUIREMENTS - RESIDENTIAL BUILDINGS

The maximum average coefficient of heat transmission for construction elements between conditioned and unconditioned space for residential occupancy shall be as follows:

CONSTRUCTION ELEMENT	U-VALUE[1]	R-VALUE[1]
Walls (except basement, cellar, and crawl space)	.065	15.40
Basement, cellar, and crawl space walls	.130	7.69
Ceilings	.0263	38.00
Floors [2]	.034	30.00
Roofs	.0263	38.00
Glazing in Windows and Doors	.56	1.79

[1] U-Values and R-Values do not require adjustments for framing.

[2] Insulation not required for basement floors more than 3 feet below grade; otherwise, see slab-at-grade floors.

Walls: Where practicable, walls shall meet stated R-value for “walls (except basement, cellar and crawl space)" at exterior floor perimeter bands.

Interior insulation shall be a minimum depth of three feet below grade or to the basement floor whichever is less.

When insulation is applied to the exterior side of foundation walls which are partly above grade, the insulation shall have a protective covering installed as recommended by the manufacturer on the above-grade section and the top one foot of the insulation material below grade.

Glazing and doors: Glazed area other than effective south glazing shall total no more than fifteen percent of the gross floor area. Additional glass area may be added as effective south glazing. The effective south glazing area must be integrated into the design so that indoor temperatures throughout the building can be maintained within the human comfort range at all times. A thermal storage material equal to a minimum of twenty-two B.T.U. per degree Fahrenheit for each square foot of effective south glazing shall absorb the heat energy from the solar input which might otherwise result in building temperature variations above the human comfort range. Basement floor area shall contribute to glazed area allowance for basement only. All spaces around exterior framing shall be filled with insulation.

Slab-at-grade floors: Perimeter insulation shall be used to reduce the slab heat loss. The thermal resistance of the insulation around the perimeter of the floor shall have a minimum resistance of R-7 for heated slabs and R-5 for unheated slabs. The insulation shall extend downward from the top of the slab for a minimum distance of twenty-four inches or downward to the bottom of the slab, then horizontally below the slab for a minimum total distance of twenty-four inches. This applies only to that part of the total slab which is below a heated space. Insulation not required for floors more than 3 feet below grade.

Air leakage - Windows -- Windows shall be designed to limit air leakage into or from the building. Air leakage rate for windows shall not exceed 0.5 cfm per foot of sash crack when tested at a pressure differential of 1.576 lb/ft., equivalent to the impact pressure of 25 mph wind.

Air leakage - Doors: All exterior doors shall be designed to limit air leakage into or from the building when in a closed position.

Air leakage for manual sliding glazed doors shall not exceed 0.5 cubic feet per minutes per square foot of door area in the closed position, when tested at a pressure differential of 1.567 lb/ft.

Compliance with the criteria for air leakage of all types of windows and doors shall be determined by American Society for Testing Materials 283-73, "standard method of test for rate of air leakage through exterior windows, curtain walls, and doors."

Fireplaces: All woodburning fireplaces and combustion air intakes for woodburning fireplaces shall be equipped with dampers.

Caulking and sealants: Exterior joints around windows and door frames, between wall and foundation, between wall and roof, between wall panels, at penetrations of utility services through walls, floors and roofs, and all other openings to the exterior envelope shall be caulked, gasketed, and/or otherwise sealed in an approved manner.

Vapor barriers: When the construction includes any material including insulation that would be damaged by moisture or its freezing, a vapor barrier shall be installed as near to the warm surface of the walls, ceiling, roof, and floors as practicable. Vapor barriers are not, however, required on ceilings which have a ventilated attic space above the ceiling. The vapor barrier shall have a maximum transmission rating of .25 perm or a rating lower than that of all other materials included as part of the wall, ceiling, roof, or floor of which the vapor barrier is applied, whichever is lowest.

Building insulation: Materials used for insulation shall be of approved effectiveness and adequate durability as established by nationally recognized testing laboratories or agencies to assure that required design conditions concerning heat losses are maintained. Insulation in contact with the ground shall be of such a type so as not to be adversely affected by soil, vermin, or water. When eave vents are installed, adequate baffling of the vent opening must be provided to deflect the incoming air above the surface of the insulation.

Insulation air barrier: An air barrier, which may be house wrap, drywall, rigid sheathing or similar material, is required on the cold side of insulated walls located adjacent to attics, unheated spaces or sky light enclosures. Walls adjacent to heated spaces shall meet minimum R- values as specified in Section 1103. (Ord. 17996 §70; May 13, 2002).

20.10.710 Chapters 12 through 42 of the International Residential Code Deleted.

Chapters 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, and 42 of the International Residential Code are hereby deleted. (Ord. 17996 §71; May 13, 2002).